

09/08/20
12:28:06

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 13043 ***

C:\Users\Robert\Documents\Cantium\Sites\Customers\HLC Wood Products\Env Permits

SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (G/S)	=	0.100000
STACK HEIGHT (M)	=	18.0000
STK INSIDE DIAM (M)	=	0.4900
STK EXIT VELOCITY (M/S)	=	6.1000
STK GAS EXIT TEMP (K)	=	352.4000
AMBIENT AIR TEMP (K)	=	284.0000
RECEPTOR HEIGHT (M)	=	0.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (M)	=	14.5000
MIN HORIZ BLDG DIM (M)	=	50.0000
MAX HORIZ BLDG DIM (M)	=	90.0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 0.697 M**4/S**3; MOM. FLUX = 1.800 M**4/S**2.

*** STABILITY CLASS 4 ONLY ***
*** ANEMOMETER HEIGHT WIND SPEED OF 4.50 M/S ONLY ***

*** SCREEN DISCRETE DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
50.	20.07	4	4.5	4.9	1440.0	18.03	4.31	8.69	SS
100.	19.93	4	4.5	4.9	1440.0	18.03	8.20	11.44	SS
150.	17.23	4	4.5	4.9	1440.0	18.03	11.93	14.44	SS
200.	13.78	4	4.5	4.9	1440.0	18.03	15.56	15.99	SS
250.	11.38	4	4.5	4.9	1440.0	18.03	19.12	17.50	SS
300.	9.610	4	4.5	4.9	1440.0	18.03	22.61	18.99	SS
350.	8.241	4	4.5	4.9	1440.0	18.03	26.05	20.44	SS
400.	7.156	4	4.5	4.9	1440.0	18.03	29.45	21.88	SS
450.	6.279	4	4.5	4.9	1440.0	18.03	32.82	23.29	SS
500.	5.559	4	4.5	4.9	1440.0	18.03	36.15	24.68	SS
550.	4.960	4	4.5	4.9	1440.0	18.03	39.45	26.06	SS
600.	4.455	4	4.5	4.9	1440.0	18.03	42.72	27.41	SS
650.	4.025	4	4.5	4.9	1440.0	18.03	45.96	28.76	SS
700.	3.657	4	4.5	4.9	1440.0	18.03	49.19	30.08	SS
750.	3.339	4	4.5	4.9	1440.0	18.03	52.39	31.40	SS

DWASH= MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** REGULATORY (Default) ***
 PERFORMING CAVITY CALCULATIONS
 WITH ORIGINAL SCREEN CAVITY MODEL
 (BRODE, 1988)

*** CAVITY CALCULATION - 1 ***

CONC (UG/M**3) = 0.000
CRIT WS @10M (M/S) = 99.99
CRIT WS @ HS (M/S) = 99.99
DILUTION WS (M/S) = 99.99
CAVITY HT (M) = 14.76
CAVITY LENGTH (M) = 61.72
ALONGWIND DIM (M) = 50.00

*** CAVITY CALCULATION - 2 ***

CONC (UG/M**3) = 0.000
CRIT WS @10M (M/S) = 99.99
CRIT WS @ HS (M/S) = 99.99
DILUTION WS (M/S) = 99.99
CAVITY HT (M) = 14.50
CAVITY LENGTH (M) = 46.99
ALONGWIND DIM (M) = 90.00

CAVITY CONC NOT CALCULATED FOR CRIT WS > 20.0 M/S. CONC SET = 0.0

END OF CAVITY CALCULATIONS

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	20.07	50.	0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **
